What is claimed is:

1. A communication device comprising:

an transfer rate estimator which estimates transfer rate of media data other than digital audio data before transmission;

a data amount controller which controls the amount of the digital audio data to be transmitted in accordance with the transfer rate estimated by said transfer rate estimator; and

a transmitter which transmits the audio data whose data amount is controlled by said data amount controller and the media data other than the audio data.

2. The communication device according to claim 1, further comprising an input device which input the audio data and the media data other than the audio data to said communication device.

3. The communication device according to claim 1, wherein said transmitter transmits data amount information indicating whether the amount of the data is controlled by said data amount controller, together with the audio data.

4. The communication device according to claim 1, wherein said data amount controller thins out the audio data to control its data amount.

5. The communication device according to claim 1, wherein the media data other than the audio data includes MIDI data.

6. A communication device comprising:

a receiver which receives audio data and data amount information indicating

26

whether data amount of the audio data is controlled;

a data amount restorer which restores the controlled data amount of the audio data to original data amount with reference to the data amount information; and

a reproduction indicator which indicates reproduction of the audio data whose data amount is restored by said data amount restorer.

7. The communication device according to claim 6, wherein said receiver also receives media data other than the audio data; and

said reproduction indicator also indicates reproduction of the media data other than the audio data.

8. The communication device according to claim 6, wherein said data amount restorer interpolates the audio data to restore the data amount of the audio data to the original data amount.

9. The communication device according to claim 7, wherein the media data other than the audio data includes MIDI data.

10. A communication method comprising the steps of:

(a) estimating transfer rate of media data other than digital audio data before transmission;

(b) controlling data amount of the digital audio data to be transmitted in accordance with the estimated transfer rate; and

(c) transmitting the audio data whose data amount is controlled by said step (b) and the media data other than the audio data.

11.   The communication method according to claim 10, further comprising the step (d) of inputting the audio data and the media data other than the audio data before executing said step (a).

5   12.   The communication method according to claim 10, wherein said step (c) transmits data amount information indicating whether the amount of the data is controlled by said step (b), together with the audio data.

13.   The communication method according to claim 10, wherein said step (b) thins

10   out the audio data to control its data amount.

14.   The communication method according to claim 10, wherein the media data other than the audio data includes MIDI data.

15   15.   A communication method comprising the steps of:

(a) receiving audio data and data amount information indicating whether data amount of the audio data is controlled;

(b) restoring the controlled data amount of the audio data to original data amount with reference to the data amount information; and

20   (c) indicating reproduction of the audio data whose data amount is restored by said step (b).

16.   The communication method according to claim 15, wherein said step (a) also receives media data other than the audio data; and

25   said step (c) also indicates reproduction of the media data other than the audio data.

17.   The communication method according to claim 15, wherein said step (d) interpolates the audio data to restore the data amount of the audio data to the original data amount.

5   18.   The communication method according to claim 16, wherein the media data other than the audio data includes MIDI data.

19.   A recording medium storing a program which causes a computer to execute the steps of:

10   (a) estimating transfer rate of media data other than digital audio data before transmission;

          (b) controlling data amount of the digital audio data to be transmitted in accordance with the estimated transfer rate; and

          (c) transmitting the audio data whose data amount is controlled by said step (b)

15   and the media data other than the audio data.

20.   The recording medium storing the program according to claim 19, wherein the program further causes the computer to execute the step (d) inputting the audio data and the media data other than the audio data before executing said step (a).

20

21.   The recording medium storing the program according to claim 19, wherein said step (c) transmits data amount information indicating whether the amount of the data is controlled by said step (b), together with the audio data.

25   22.   The recording medium storing the program according to claim 19, wherein said step (b) thins out the audio data to control its data amount.

23.   The recording medium storing the program according to claim 19, wherein the media data other than the audio data includes MIDI data.

24.   A recording medium storing a program which causes a computer to execute the

5   steps of:

(a) receiving audio data and data amount information indicating whether data amount of the audio data has been changed;

(b) restoring the data amount of the audio data to original data amount with reference to the data amount information; and

10   (c) indicating reproduction of the audio data whose data amount is restored by said step (b).

25.   The recording medium storing the program according to claim 24, wherein said step (a) also receives media data other than the audio data; and

15   said step (c) also indicates reproduction of the media data other than the audio data.

26.   The recording medium storing the program according to claim 24, wherein said step (d) interpolates the audio data to restore the data amount of the audio data to the

20   original data amount.

27.   The recording medium storing the program according to claim 25, wherein the media data other than the audio data includes MIDI data.

25   28.   A communication device comprising:

transfer rate estimation means for estimating transfer rate of media data other

30

than digital audio data before transmission;

data amount controlling means for controlling data amount of the digital audio data to be transmitted in accordance with the transfer rate estimated by said transfer rate estimator; and

5   transmission means for transmitting the audio data whose data amount is controlled by said data amount controlling means and the media data other than the audio data.